### INTERNATIONAL SEARCH REPORT

International application No. PCT/CA2005/000007

A. CLASSIFICATION OF SUBJECT MATTER: (IPC 7) C07D403/12, C07D405/12, C07D309/30, C07D211/74, C07D207/24, C07D213/65, C07D401/12, A61K31/341, A61K31/445, A61K31/44, A61K31/44, A61K31/40, A61K31/55, A61K31/4433, A61K31/506, A61P19/08

According to International Patent Classification (IPC) or to both national classification and IPC

#### **B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

(IPC 7) C07D, A61K, A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms Canadian Patent Database, PubMed, Delphion, STN, Espacenet ("capthepsin inhibitors, leucinamide-amino-carboxylate")

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant  | Relevant to claim No(s). |  |
|-----------|--|--------------------------|--|
| X, P      | WO 04 033445 (MERCK FROSST CANADA Co.) 22 April 2004 (22-04-2004) see entire document  | 1-12                     |  |
| A         | P. SAFTIG ET AL.: "IMPARED OSTEOCLASTIC BONE RESORPTION LEADS TO OSTEOPETROSIS IN CATHEPSIN-K-DIFICIENT MICE" PROG. NATL. ACAD. SCI. USA, vol 95, November 1998, pages 1353-1358 see entire document | 1-12                     |  |
| A         | S.K. THOMPSON ET AL.: "DESIGN OF POTENT AND SELECTIVE<br>HUMAN CATHEPSIN K INHIBITORS THAT SPAN THE ACTIVE SITE"<br>PROG. NATL. ACAD. SCI. USA   | 1-12                     |  |

#### [ ] Further documents are listed in the continuation of Box C. [X] See patent family annex.

| •   | Special categories of cited documents:                                 |
|-----|--|
| "A' | document defining the general state of the art which is not considered |
|     | to be of norticular relevance  |

earlier application or patent but published on or after the international "E"

"L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other

document published prior to the international filing date but later than the priority date claimed

later document published after the international filing date or

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" and the stable stable document of particular relevance to the stable stable document.

is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family

Date of mailing of the international search report

Date of the actual completion of the international search

03 March 2005 (03-03-2005)

Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT

50 Victoria Street Gatineau, Quebec KIA 0C9

Facsimile No: 001(819)953-2476

Authorized officer

Gérald McManus (819) 956-6126

11 May 2005 (11-05-2005)

# INTERNATIONAL SEARCH REPORT

International application No. PCT/CA2005/000007

| Patent Document<br>Cited in Search Report | Publication<br>Date | Patent Family<br>Member(s) | Publication<br>Date | · |  |
|---|---------------------|----------------------------|---------------------|---|--|
| WO2004033445                              | 22-04-2004          | WO2004033445 A1            | 22-04-2004          |   |  |